450W 1/2 Sheet sander

User Guide & Warranty

3 YEAR WARRANTY

CUSTOMER HELPLINE

CE

After Sales Support

Now you have purchased a Power Craft product you can rest assured in the knowledge that as well as your 3 year parts and labour warranty you have the added peace of mind of dedicated helplines and web support.

AFTER SALES SUPPORT

UK HELPLINE NO 0905-1460005
IRELAND HELPLINE NO 1520-932626
WEB SUPPORT www.heltec.eu

MODEL NUMBER: POS-450

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Introduction

Congratulations on choosing to buy a PowerCraft product.

By doing so you now have the assurance and peace of mind that comes with purchasing a product made by one of Europe's leading manufacturers.

All products brought to you by PowerCraft are manufactured to the highest standards of performances and safety, and, as part of our philosophy for customer service and satisfaction, are backed by our comprehensive 3 Year Warranty.

We hope you will enjoy using your purchase for many years to come.

450W 1/2 Sheet sander

Always read the instructions for electrical products carefully before use. It will help you understand your product better and avoid unnecessary risks. Keep this instructions manual in a safe place for future use.

This orbital sander is designed for dry sanding of surfaces of wood, plastic and filler as well as for painted surfaces.

Machine specifications

Technical specifications

Voltage	230 V~
Frequency	50 Hz
Input power	450 W
Tool class	II
No load speed	8000-12000/min
Weight	2.8 kg
Lpa (Sound pressure level)	80.5 dB(A)
Lwa (Sound power level)	91.5 dB(A)
Vibration	7.4 m/s^2

Product information

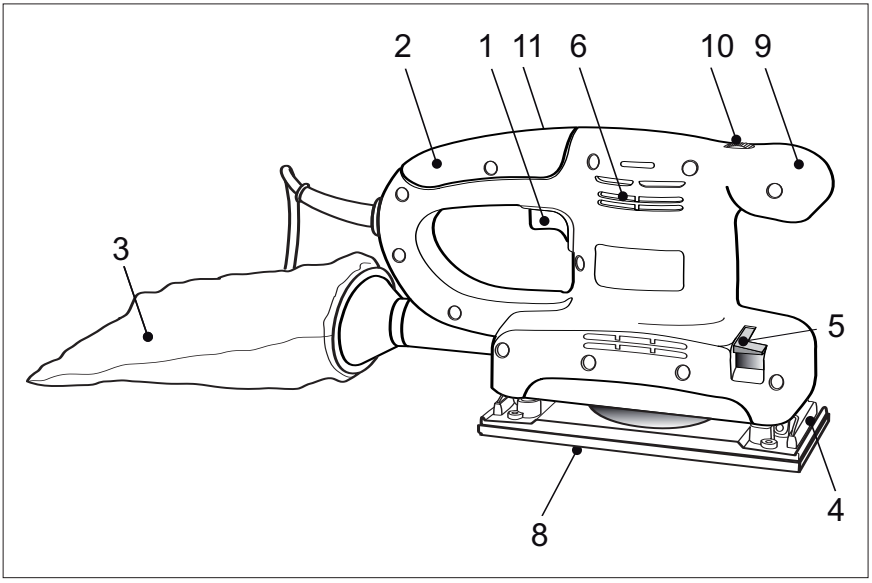


Fig. 1
1. On/off switch
2. Handle (behind)

Machine specifications

3. Dust bag
4. Paper clamp
5. Handle paper clamp
6. Ventilating apertures
7. Sandpaper
8. Sanding sole
9. Handle (front)
10. Adjusting wheel
11. Lock-on button for on/off switch

Package contents

1 450W 1/2 Sheet sander
5 Sand paper
  1 Grain 60
  2 Grain 80
  2 Grain 120
1 Dust bag
1 User manual

Safety instructions

The following symbols are used in these instructions:

Read the instructions carefully.

Conformity with the relevant EU safety directives.

Class II machine - double insulation - earth connection not required.

Danger of life and risk of injury as well as risk of damage to the machine in case of non-adherence to the safety instructions in these instructions of use.

Danger of electric shock.

Wear a dust mask.

Wear ear and eye protection.

Remove the plug from the mains socket.

Variable speed control.

Safety instructions

General safety instructions
Caution! Read all instructions. The non-observation of the instructions mentioned below may cause an electric shock, fire and/or severe injuries. The term "electric tool" mentioned below refers to mains-operated electric tools (with power cord) and to rechargeable electric tools (without power cord). Keep these instructions for use in a safe place.

1) Workplace
(a) Keep your workplace clean and tidy. Untidy and badly illuminated work areas may lead to accidents.
(b) Do not operate this machine in potentially explosive environments containing combustible liquids, gases or dusts. Electric tools send out sparks which may ignite dust or vapours.
(c) Keep children and other persons away from the electric tool during use. When distracted, you may lose control over the apparatus.

2) Electric safety
(a) The plug of the machine has to be suitable for the socket. The connector may not be modified in any way. Do not use an adapter plug together with earthed devices. Unchanged connectors and fitting sockets reduce the risk of an electric shock.
(b) Avoid body contact to earthed surfaces, such as pipes, radiator, stoves and refrigerators. There is a higher risk of an electric shock, if your body is earthed.
(c) Keep the machine clear of rain or humidity. The penetration of water into an electrical device increases the risk of an electric shock.
(d) Do not use the cable for unintended purposes, to carry or suspend the machine or to pull the connector out of the socket. Keep the cable clear of heat, oil, sharp edges or any moving parts. Damaged or entangled cables increase the risk of an electric shock.
(e) When using an electric tool in the open, use an extension cable only which has been approved for outdoor use. The use of an extension cable suitable for use in the open will reduce the risk of an electric shock. Always use an RCD (redicual circuit device or circuit breaker).
(f) Hold the machine at the insulated gripping surfaces as the belt grinder may hit its own power cord. Damaging a live cable may make metal machine parts live, which may lead to an electric shock.

3) Personal safety
(a) Please pay attention and watch what you are doing, and carry out the

Safety instructions

work with the electric tool sensibly. Do not use the machine, when you are tired or under the influence of drugs, alcohol or medicine. A moment of carelessness in the use of the machine could lead to serious injuries.

(b) Wear your safety equipment and always put on safety goggles. Wearing personal protective gear, such as dust mask, anti-skid safety shoes, hard hat and ear protection, depending on the type of use of the electric tool, will reduce the risk of injury.

(c) Avoid unintentional operation. Make sure that the switch is in the "OFF" position before you remove the plug from the socket. If you have your finger on the switch when carrying the machine or if you connect the running machine to the socket, this may lead to accidents.

(d) Remove the adjusting tools or the spanners before switching on the machine. A tool or a key which is located in a revolving part of the machine may lead to injuries.

(e) Concentrate at all times. Ensure a safe stand and keep your balance at all times. In this case you will be able to control the machine better in unexpected situations.

(f) Wear suitable clothing. Do not wear any loose clothing or jewellery. Keep your hair, clothing and gloves clear of any moving parts.

(g) If dust extraction or collection devices can be mounted, make sure that they are connected properly and are used in the proper way. The use of these pieces of equipment reduce hazards caused by dust.

4) Careful handling and use of electric tools

(a) Use the correct tool for the job at hand.

(b) Do not use an electric tool, if the switch is defective. An electric tool, which cannot be switched on or off, is dangerous and has to be repaired.

(c) Remove the plug from the socket before setting down the machine, changing accessories or putting the machine aside. This precautionary measure prevents the unintentional start of the machine.

(d) Keep unused electric tools out of reach of children. Do not permit persons to use the machine who are not familiar with it or who have not read these instructions. Electric tools are dangerous, if they are used by inexperienced persons.

(e) Maintain the machine with care. Please check whether the movable parts are perfectly operational and do not jam, whether parts have broken or have been damaged in such a way that the function of the machine is impaired. Have damaged parts repaired prior to using the

Safety instructions

machine. Many accidents are caused by electric tools which are poorly maintained.

(f) Keep all cutting tools sharp and clean.

(g) Use the electric tool, the accessories, the insert tools, etc according to these instructions, and in the way described for this special type of apparatus. In the process, take the working conditions and the work to be carried out into consideration. Only use this belt sander for the purpose for which it is intended.

(h) Use clamps or vice to hold work. It is safer then using your hands and frees both hands to operate the tool.

5) Servicing

(a) Have your machine repaired by qualified expert staff using original spare parts only.

(b) Caution! The use of accessories or add-on devices other than those recommended in these instructions may mean a risk of injury. Use original spare parts only.

Additional safety instructions

- Contact or inhalation of dust coming free during sanding (e.g. lead painted surfaces, woods and metals), can endanger the health of operator and bystanders. Always wear appropriate personal equipment as a dust mask and use the dust bag during sanding.
- Check that the switch is not in the “ON” position before connecting the machine to the mains voltage.
- Always keep away the mains lead from moving parts of the machine.
- When working with the machine, always hold it firmly with both hands and provide for a secure stance.
- Use safety glasses, especially when sanding above your head.

Immediately switch off the machine when:

- Excessive sparking of the carbon brushes and verticiliosis in the collector.
- Interruption of the mains plug, mains lead or mains lead damage.
- Defect switch
- Smoke or stench of scorched isolation

Electrical safety

When using electric machines always observe the safety regulations applicable in your country to reduce the risk of fire, electric shock and

Safety instructions

personal injury. Read the following safety instructions. Keep these instructions in a safe place!

Always check that the power supply corresponds to the voltage on the rating plate.

Your machine is double insulated; therefore no earthwire is required.

When replacing old cables or plugs
Throw away old cables or plugs immediately as soon as new ones have replaced these. It is dangerous to put the plug of a loose cable into an electrical socket.

When using extension cables
Only use an approved extension cable that is suitable for the machine's power. The cables must have a diameter of at least 1.5 mm^2. When the extension cable is on a reel, unroll the cable in its entirety.

Assembly

Dust collection

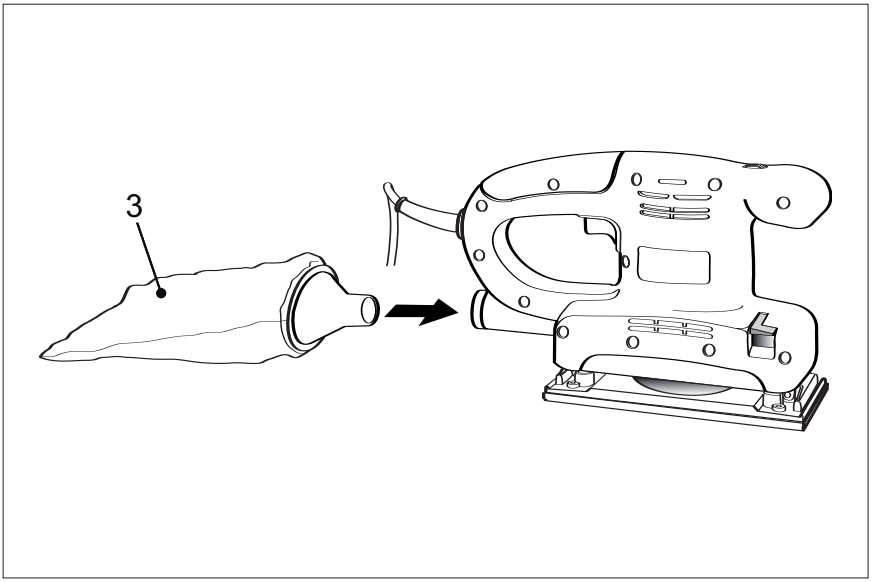


Fig. 2

The sander has been carried out with a dust bag (3) to keep the working surface clean. The dust bag must be installed on the back side of the machine, on the opening. It is necessary to empty the dust bag regularly for an efficient use.

Empty it as follows:
- Turn the dust bag slightly and pull it out of the machine's adapter.
- Empty the dust bag in a suitable place.
- Push the dust bag on to the machine's adapter till it locks into place.

Remember that the dust extraction only works when using perforated sandpaper.

Assembly

Replacing worn sanding paper

This machine is suitable for Velco® sanding paper and universal sanding paper.

Before assembly sanding paper always remove the plug from the mains.

Velcro® sanding paper (230 x 115 mm)
The sandpaper is fixed by Velcro® fastener to facilitate the replacement.

- Simply pull off the sanding paper.
- Press the new one in the centre of the sanding sole.

Universal sanding paper (280 x 115 mm)

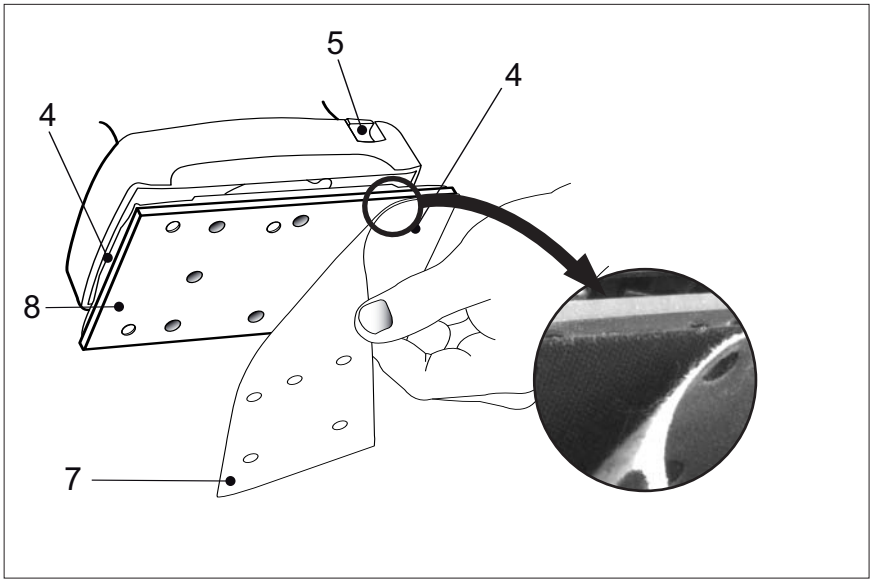


Fig. 3

Assembly

The sanding machine is provided with a rectangle sanding sole. By tightening the sandpaper it does not wear out so fast, so it will wear well longer.

- Open the back paper clamp (4) by pulling the handle (5) up.
- Install the sandpaper under the clamp. Put the paper in the middle of the sanding sole and look after the perforations in the paper. They have to correspond with those on the sanding sole, so that the dust can be exhausted.
- Push the handle back into its original position.
- Repeat the operation to fix the sand-paper on the front side.
- Fix the sandpaper as tight as possible.

Coarse sand-paper (grain 50) removes in general the bigger part of the material and fine sand-paper (grain 120) is used for the finishing.

Replacing the sanding sole
The sole has to be replaced when the Velcro® has been worn out.

Before replacing the sanding sole disconnect the sander from the mains.

- Remove the sandpaper of the sole.
- Remove the screws which the sole is fixed to the sander.
- Remove the sole.
- Install the new sole on the sander.
- Tighten the screws well.

Operation

Operation
- Push in the on/off switch (1) to start the machine.
- By adjusting the adjusting wheel (10) you can regulate the speed.
- The ventilating apertures (6) on the housing must remain clear to ensure optimum cooling of the motor.
- Move the sander over the surface of your workpiece.
- Let loose the same on/off switch to stop the machine.
- The on/off switch can be blocked in position "ON" by pushing the lock-on button (11) on the side, while you keep pushing the on/off switch. The machine can be stopped by briefly pushing the on/off switch again.

Prevent pushing too much on the machine during sanding. Excessive sanding pressure does not lead to increased sanding capacity, but increases wear of the machine and the sandpaper.

Grips
The sander is equipped with two grips: a handle at the front side and one on the back side. Always hold the sander with both hands on the handles, so as to gain the best possible control over your sanding operations. Besides you do not risk to become in touch with the moving parts.

User tips
- Apply long uniform movements to your sander to obtain the best possible results.
- The surface quality after sanding is determined by the selected grain.

Maintenance

Disconnect the machine from the mains before carrying out cleaning and maintenance work.

This machine has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper machine care and regular cleaning.

Cleaning
Regularly clean the machine housing with a soft cloth, preferably after each use. Keep the ventilation slots free from dust and dirt. If the dirt does not come off use a soft cloth moistened with soapy water. Never use solvents such as petrol, alcohol, ammonia water, etc. These solvents may damage the plastic parts.

Lubrication
The machine requires no additional lubrication.

Troubleshooting

• The electromotor gets hot	• Clean the ventilating apertures
• The dust is not extracted	• The dust bag is full / empty the dust bag
• The abrasive paper is filled with adhesive/paint or a similar material	• Paint or adhesive is not really dry. • Some paints stick more to the abrasive paper than others / clean the abrasive paper at regular intervals

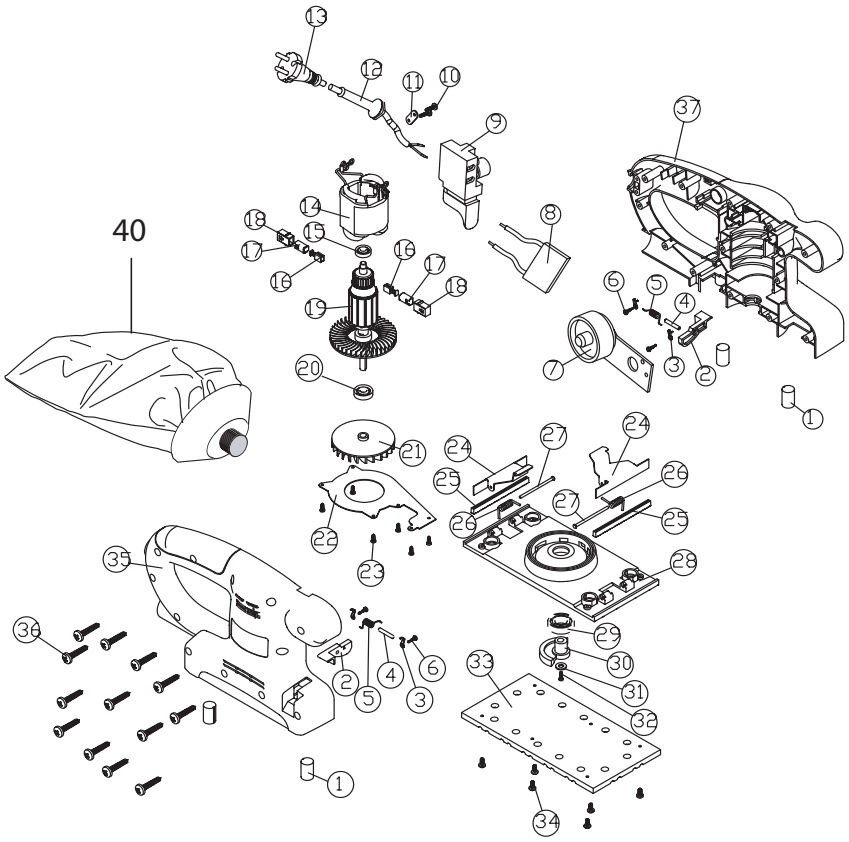
Faults
Should a fault occur, please contact the address on the warranty card. On the back page of this manual you will find an exploded view showing the parts that can be ordered.

Maintenance

Environment
In order to prevent the machine from damage during transport, it is delivered in a sturdy packaging. Most of the packaging materials can be recycled. Take these materials to the appropriate recycling locations.

Faulty and/or discarded electrical or electronic machines have to be collected at the appropriate recycling locations.

Exploded view



Parts list

No.	Description	Position
408214	Support bar	1
408215	Speed adjuster	7
408220	On/off switch	9
408221	Carbon brush (set)	16
408223	Sand sole	33
408224	Paper clamp complete	24 till 27
408260	Dust bag	40

Warranty

EC DECLARATION OF CONFORMITY

We **Ferm B.V.**
Lingenstraat 6, 8028 PM Zwolle, The Netherlands
declare that the design and construction of the following machine, in the form supplied by us, comply with the requirements of the appropriate EC directives.
Product Description: **450W 1/2 Sheet sander**
Model: **POS-450**
In confirmity with the following standards or standardization documents: **EN60745-1, EN60745-2-4, EN55014-1, EN55014-2, EN61000-3-2, EN61000-3-3**
According to the provision of the directives: **98/37/EC, 2006/95/EC, 2004/108/EC, 2002/95/EC, 2002/96/EC**

J.A. Bakker - van Ingen
CEO Ferm B.V.

J. Lodewijk
Quality Manager Ferm Global

05-2008

WARRANTY CERTIFICATE

Year of manufacture: 05-2008 450W 1/2 Sheet sander POS-450
Congratulations! You have made an excellent choice with the purchase of this Quality product. Our commitment to quality also includes our service. Should you, contrary to expectations, experience defects due to material or manufacturing faults during private use within 36 months of the date of purchase we shall be liable for warranty in accordance with statutory warranty regulations, provided that: - The device was not put to any use other than the intended.- Was not overloaded. - Was not used with the wrong accessories. - Repairs where not carried out by any other than the authorised workshop. The warranty certificate is only valid in connection with the receipt. Please keep both in a safe place. The warranty does not affect your statutory rights.
The product is guaranteed for a period of three years beginning on the day of purchase. Keep your purchase receipt safe as proof of the date of purchase. The guarantee period can only be extended for the duration of any repair required.
During the warranty period if the item becomes defective, in the first instance, please call the helpline. We will, at our discretion either repair or exchange the device in accordance with warranty legislation.

Please include the following when sending in your product for repair:
1. The receipt (proof of purchase)
2. This warranty certificate with your name, address, contact details and a fault description completed overleaf.

If the original receipt is not enclosed the repair will be charged for in all cases. After the warranty has expired you can still send defective devices for repairs **FREIGHT PREPAID** to the address at the end of this booklet. Quotes as well as repairs after warranty period are to be paid for in all cases. Ensure the product is sent well packed as no responsibility can be accepted for items lost or damaged in transit. This warranty does not affect your statutory rights.

POWER CRAFT

450W 1/2 Sheet sander

POS-450

If you are requested by the manufacturer to return the item for repair please complete the enclosed section and send it together with your product and your receipt (proof of purchase) to the service address shown below.

Name: _____

Address: _____

_____

Contact Telephone No.: _____

E-mail: _____

Location of purchase: _____

Fault Description: _____

_____

_____

In order to deal with your enquiry as quickly and efficiently as possible, we ask you to send your enquiry by email (heltec@circuit-tech.co.uk). Do not forget to include your name, address and a daytime telephone number.

Alternatively, you can contact our service hot-line on the number given below.
Office hours are as follows:
Mon - Fri: 8 am - 6 pm, Sat: 10 am - 2 pm, Sun: 10 am - 4 pm

UK Helpline

Heltec Ltd.
Circuit Tech Ltd.
Units 1/9 Stanley Mill • Kirkebrok Road • Deane, Bolton Lancs, England • BL3 4JE

Service Center
0905-1460005 - £ 0.06 / min.

Ireland Helpline

Heltec Ltd.
Circuit Tech Ltd.
Units 1/9 Stanley Mill • Kirkebrok Road • Deane, Bolton Lancs, England • BL3 4JE

Service Center
1520-932626 - € 0.15 / min.

WEB SUPPORT

www.heltec.eu

GB/IRE-0802-08

Replacements or repairs under guarantee regulations are free of charge.